CDM
125 Maiden Lane, 5th Floor
New York, New York 10038
tel: 212 785-9123
fax: 212 785-6114

August 20, 2010

Kansas City District Corps of Engineers
CENWK- PM-ED Kristine Stein
601 East 12th Street
Kansas City, Missouri 64106-2896

ATTN: CENWK-PM-ED-Kristine Stein

Tanya Mitchell
U.S. Environmental Protection Agency, Region 2
290 Broadway-19th Floor
New York, NY 10007-1866

PROJECT: Contract No. W912DQ-08-D-0018

SUBJECT: Final Beach Debris and Timber Removal Letter Report
Raritan Bay Slag Superfund Site
Old Bridge/Sayreville, New Jersey

Dear Ms. Stein and Ms. Mitchell:

CDM is pleased to submit the subject letter report for the Raritan Bay Slag Superfund Site (the site) in Old Bridge/ Sayreville, New Jersey. The purpose of this report is to summarize the removal activities performed and provide copies of documentation from these tasks. These tasks were performed in accordance with the Quality Assurance Project Plan (QAPP), dated April 2010, and the Accident Prevention Plan (APP), dated March 2010 (modified May 2010).

Site Location and Background

The site is located on the shore of Raritan Bay, in the eastern part of Old Bridge Township within the Laurence Harbor section in Middlesex County, New Jersey. A small portion of the northern end of the site, the western jetty at the Cheesequake Creek Inlet, is located in the Borough of Sayreville. The site is bordered to the north by Raritan Bay and to the east, west and south by residential properties. State Highway 35 is located to the south beyond the residential properties. Figure 1 (Attachment A) shows the location of the site.

The site is approximately 1.5 miles in length and consists of the waterfront area between Margaret's Creek and the area just beyond the western jetty at the Cheesequake Creek Inlet. The portion of the site in Laurence Harbor is part of the Old Bridge Waterfront Park. The park is made up of walking paths, a playground area, several public beaches, and three jetties, not including the two jetties at the Cheesequake Creek Inlet. The park waterfront is protected by a seawall, which is partially constructed with pieces of slag. The western jetty at the Cheesequake Creek Inlet and the adjoining waterfront area west of the jetty are located in Sayreville, and also contain slag. The slag was placed at the site approximately 40 years ago. The seawall, jetties, beach area east of the Cheesequake Creek Inlet, and the western jetty at

the Cheesequake Creek Inlet are popular fishing areas. The beaches east of the Cheesequake Creek Inlet and west of the seawall appear to be the most popular for swimming.

Objective

Recent storm events caused significant debris deposits at the seawall (Area 1) and adjacent Beach (Area 2) at the site. Although these two areas are restricted from public access by a fence, the debris impeded access to sampling locations and created an eyesore for the community. The storm also deposited timber and debris in Margaret's Creek (Area 9). Large timbers were present in locations at and along the tributaries of Margaret's Creek. The timbers formed dams in the tributaries and were affecting drainage of the creek. Timbers were observed along approximately 225 feet of the eastern fork of Margaret's Creek and approximately 25 to 30 feet in 2 areas along the western fork of the creek. At the direction of the United States Army Corps of Engineers (USACE), CDM procured the services of a debris removal subcontractor to remove the debris and timbers.

Debris Sampling

CDM oversaw debris sampling performed on May 11, 2010, by Custom Environmental Management Co. Inc. (CEMCO). Debris sampling was conducted to characterize the waste for disposal purposes. Two composite samples were collected from each of four locations (total of 8 samples). Two composite debris samples were collected from Area 1, from a debris pile area near the fence-line. Six composite samples were collected from three locations within Area 2; two samples were collected from each of three areas designated as A, B and C (Figure 2). The samples were collected, mixed in a five-gallon bucket, transferred to two one-liter jars, and sent to Integrated Analytical Laboratories laboratory for analysis. CEMCO selected total lead, arsenic, copper, and antimony analysis and Toxicity Characteristic Leaching Procedure (TCLP) lead, arsenic, copper, and antimony analyses (Attachment B) based on the site history, the analytical requirements for the presumptive disposal facility and CEMCO's professional judgment. CEMCO demobilized from the site until analytical sample results were received and the disposal facility was approved by EPA.

Analytical results were received on May 14, 2010 and the debris was determined to be non-hazardous (Attachment C). The Middlesex County Utility Authority (MCUA) Landfill was selected by CEMCO as the disposal facility. The Environmental Protection Agency (EPA) approved the use of the MCUA facility for disposal of the debris.

Beach Clean-up and Debris Removal

On May 24, 2010, CEMCO, with oversight by CDM, cleaned up debris on the beach and along the Area 2 fence-line. Air monitoring was performed during the beach clean-up and debris removal. The CEMCO crew began by hand-picking debris and trash from the beach (Area 2). They then dragged large wood debris to the side of the beach area to provide access for a rake extension that was dragged behind a Bobcat. The rake extension was subsequently changed to a grappling device, which was used to pile the collected debris in staging areas.

On May 25, 2010, CEMCO loaded debris into a container and hauled it offsite for disposal at the MCUA Landfill. CDM signed the non-hazardous waste manifest (Attachment D) on behalf of EPA. As the crew continued raking and piling debris on the beach, Central Jersey Fence cut a section of the fence adjacent to the seawall (Area 1) to provide an access-way for debris removal. A second container was hauled offsite for disposal. During removal of the debris near the surf, a large number of boots were discovered under the debris and sand. The boots were filled with sand and water making them very dense and heavy. Although the CEMCO crew attempted to remove as much sand and water as possible, the boots significantly increased the quantity of debris that required disposal.

On May 26, 2010, CEMCO continued filling and hauling three additional containers for off-site disposal at MCUA. Debris cleanup from along the top of the seawall, near the storm water discharge pipe for the road, and from the beach was completed on May 27, 2010. One additional container was hauled offsite for disposal at the MCUA Landfill. CDM signed the non-hazardous waste manifests on behalf of EPA.

On May 27, 2010, CEMCO completed debris removal from Area 2 and walked the fence line for Area 1 to removed trash. One container was hauled from the site for disposal at MCUA. Equipment was decontaminated, disturbed areas were restored, and CEMCO demobilized from the site. The fence opening was repaired by Central Jersey Fence on May 27, 2010. A total of 76.39 tons of non-hazardous debris was removed from the beach and disposed of at the MCUA facility.

Continuous air monitoring was performed at upwind and downwind locations during the beach clean-up and debris removal activities. The air monitoring instruments collected particulate data in micrograms/cubic meter of air ($\mu g/m^3$). Air monitoring levels established in the APP were not exceeded. Daily quality control reports are included in Attachment E. Site photographs from the debris removal are unavailable. However, post removal photographs are included in Attachment F.

Tree-Timber Removal

On June 7, 2010, CEMCO provided a crew of three, including an operator and two laborers, for the tree-timber removal. Continuous air monitoring was performed by CDM during the work activities. To minimize damage to Margaret's Creek and surrounding vegetation, a track-mounted backhoe with a grappler attachment was used for timber removal. Weight-distribution mats (4 feet by 8 feet) were used to access the two locations adjacent to the creek tributaries. On the afternoon of June 7, 2010, timber removal activities began along the eastern fork of Margaret's Creek. By the end of the first day, mats were installed to access the run along the eastern fork of Margaret's Creek and some of the timbers along the eastern fork were removed and staged.

On the morning of Monday, June 7, 2010, CDM met with Mr. Larry Mayerowitz, General Supervisor of the Middlesex County Department of Parks and Recreation and gained approval for two timber stockpile locations. The planned western stockpile area was

approved by Mr. Mayerowitz. However, the eastern stockpile area was relocated over 300 feet east of the proposed location, adjacent to the Route 35 access road (pipeline right-of-way), by Mr. Mayerowitz. Central Jersey Fence installed a 12-foot gate in the southwest area of the park to provide access to the western fork. A lock provided by Mr. Mayerowitz was used to secure the newly-installed gate.

Removal and stockpiling of materials from the eastern tributary was completed by the morning of Thursday, June 10, 2010. Once timber removal was completed, CDM observed that the eastern tributary is actually a drainage ditch that terminates approximately 225 feet south of the creek fork. Clearing the eastern tributary did not appreciably change the water level in the tributary or flow into the bay. CEMCO mobilized their equipment to the park to access the western fork area where they placed mats to minimized disturbance of vegetation, and began removal and temporary staging of timbers.

On Friday, June 11, 2010 CEMCO continued removal and staging of the timbers and tires from the northern and southern locations within the western tributary. They transferred timber materials from the temporary staging areas along the bank of the western fork to the approved western stockpile area. In the southern location, the timbers were observed to be densely packed and damming the western tributary.

On Monday, June 14, 2010, transfer of timbers to the western stockpile location was complete. Additional timbers were observed within the western tributary of the creek after the water level dropped as a result of increased flow following the removal of the southern timber dam in the western fork. These timbers were removed and staged on the bank adjacent to the western fork.

On Tuesday, June 15, 2010, transfer of the staged timbers to the western stockpile area was complete. The weight distribution mats and the excavator were decontaminated using a pressure sprayer. The track-rig excavator was removed from the site on Wednesday, June 16, 2010. Prior to departing the site, CDM took additional photographs, cleaned the site office, and verified that the locks were secured.

CDM performed daily air monitoring at upwind and downwind locations during tree-timber removal. The air monitoring instruments collected particulate data in $\mu g/m^3$. Air monitoring levels established in the APP were not exceeded. Daily quality control reports are include in Attachment E and selected site photographs from the debris removal are included in Attachment F.

Tire Removal

Tires were discovered during the beach debris removal and the tree-timber removal activities, as described below.

- Ten tires were collected during the beach removal and staged in Area 2.
- Six tires were removed from the eastern fork of Margaret's Creek and two tires were collected from the access roadway and stockpiled near the eastern timber stockpile area.

- Twelve tires were removed from the western fork of Margaret's Creek and stockpiled near the western timber stockpile.

On Tuesday, June 15, 2010, CEMCO pressure-sprayed the tires from the western fork to remove any sediment, loaded the tires from the western stockpile area and Area 2, and transported them to the eastern stockpile area. A total of 30 tires were stockpiled for disposal. On June 23, 2010, CEMCO returned to load and haul the 30 stockpiled tires for off-site disposal at Casings Incorporated in Hillside, New Jersey, an EPA approved facility. CDM signed the non-hazardous waste manifest on behalf of EPA (Attachment D).

Daily quality control reports are included in Attachment E.

Attachments

Attachment A	Figures
Attachment B	Debris Sampling Laboratory Results
Attachment C	MCUA non-hazardous determination letter
Attachment D	Non-hazardous waste manifests
Attachment E	Daily Quality Control Reports
Attachment F	Photo Log

Please feel free to contact me at (732) 590-4695 should you require additional information.

Very truly yours,

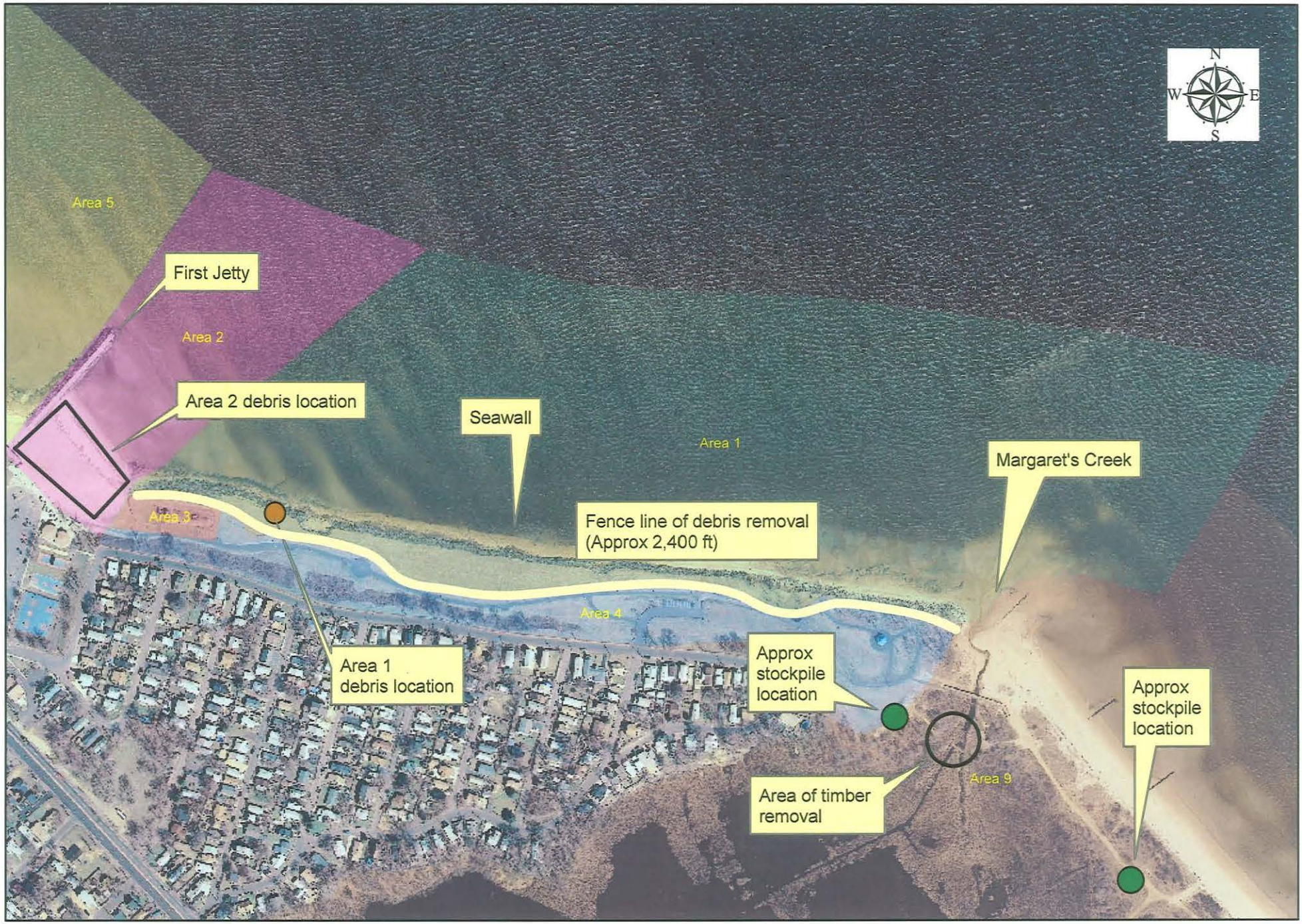
E R Leonard

CDM FEDERAL PROGRAMS CORPORATION
Edward Leonard, CHMM
Task Order Manager

Attachments

cc: J. Litwin, CDM
J. Mosher, CDM
J. Mayo, CDM
J. Oxford, CDM
Project File

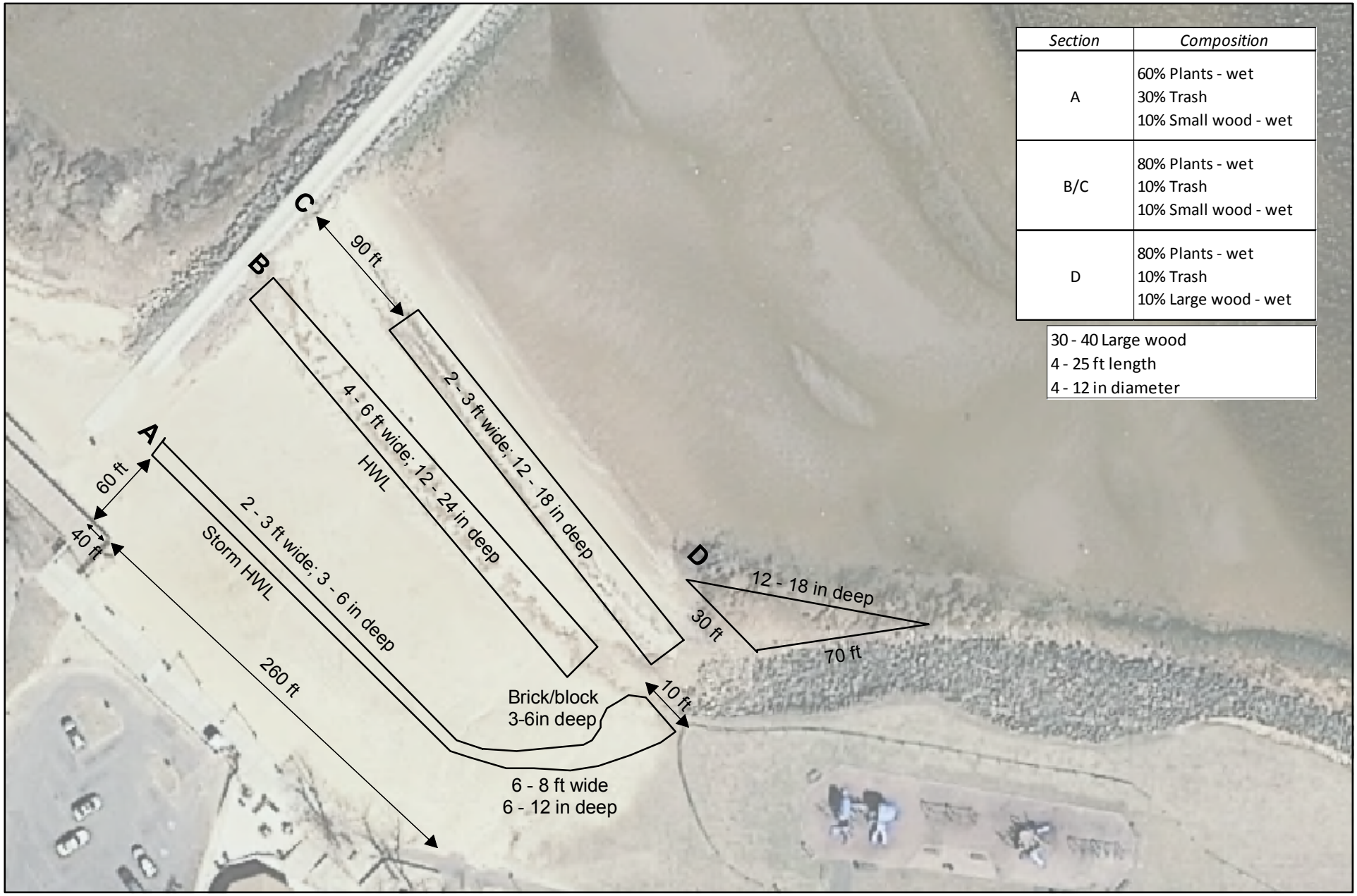
Attachment A
Figures



CDM

0 250 500 1,000 Feet

Figure 1
Timber and Additional Debris Removal
Raritan Bay Slag Site
Old Bridge and Sayerville, NJ



Section	Composition
A	60% Plants - wet 30% Trash 10% Small wood - wet
B/C	80% Plants - wet 10% Trash 10% Small wood - wet
D	80% Plants - wet 10% Trash 10% Large wood - wet

30 - 40 Large wood
4 - 25 ft length
4 - 12 in diameter

CDM

0 15 30 60 Feet

N
W E
S

Figure 2
Area 2 Debris Locations - 3/31/10
Raritan Bay Slag Superfund Site
Old Bridge and Sayreville, NJ

Attachment B
Debris Sampling Laboratory Results

July 20, 2010

CDM
Raritan Plaza 1
110 Field Crest Avenue, 6th Floor
Edison, NJ 08837

Attn: Seth Kellogg
Re: Raritan Bay Superfund Site
Debris Disposal

Dear Ms. Kellogg:

CEMCO was contracted by CDM under Subcontract No. 6402-018-001-SI for the Debris Removal/Characterization/Disposal Services at the Raritan Bay Slag Superfund Site. Eight (8) debris samples were collected on 5/11/10 and submitted for disposal characterization analysis, as per Section 2.3 of the SOW. As the only constituents of concern stated in the Site History were Lead, Antimony, Arsenic and Copper, all eight (8) grab samples were analyzed for Total Lead/Arsenic/Antimony/Copper via Method 6020, and four (4) Composite samples were analyzed for TCLP Antimony/Arsenic/Lead/ Copper via Method 1311/6020. The analytical compounds analyzed were dictated by information contained in the IFB Site History and subsequent IFB amendments and CEMCO's knowledge of the presumptive disposal facilities requirements. Analytical results confirmed all constituents of concern below RCRA regulatory levels and within the selected disposal facilities acceptance criteria.

The material was clean up debris (seaweed, trash, rocks, plastics, wood) and was classified as NJ ID-13. CEMCO performed due diligence for the constituents of concern and provided the analysis and the site history to the Middlesex County Utilities Authority for approval as per facility permit requirements.

Thank you, and please do not hesitate to contact me with any questions, or if you require any additional information.

Sincerely,

Jennifer Anton
Technical Specialist

CEMCO-Custom Environmental Management Co., Inc.
Mailing: P.O. Box 212, Hainesport, NJ 08036
Physical: Hainesport Business Park, Park Avenue East, Building 500, Suite 17, Hainesport, NJ 08036
(609) 261-3848 • 261-3574 Fax

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

CEMCO
P.O. Box 212
Hainesport, NJ 08036

Project Name: **CDM DEBRIS REMOVAL**
IAL Case Number: **E10-04553**

These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

SUMMARY REPORT
Client: CEMCO
Project: CDM DEBRIS REMOVAL
Lab Case No.: E10-04553

	Lab ID:	04553-001			04553-002			04553-003			04553-004		
	Client ID:	AREA A DEBRIS 1			AREA A DEBRIS 2			AREA B DEBRIS 1			AREA B DEBRIS 2		
	Matrix:	Solid			Solid			Solid			Solid		
	Sampled Date	5/11/10			5/11/10			5/11/10			5/11/10		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (Units)		*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
Antimony		2.68		0.625	1.91	J	0.625	ND		0.625	0.724	J	0.625
Arsenic		1.08	J	0.625	1.20	J	0.625	0.661	J	0.625	0.924	J	0.625
Copper		6.95		1.25	9.37		1.25	10.6		1.25	15.8		1.25
Lead		86.9		0.313	63.1		0.313	26.2		0.313	9.81		0.313

	Lab ID:	04553-005			04553-006			04553-007			04553-008		
	Client ID:	AREA C DEBRIS 1			AREA C DEBRIS 2			AREA 1 DEBRIS 1			AREA 1 DEBRIS 2		
	Matrix:	Solid			Solid			Solid			Solid		
	Sampled Date	5/11/10			5/11/10			5/11/10			5/11/10		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (Units)		*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
Antimony		1.00	J	0.625	3.90		0.625	1.22	J	0.625	1.14	J	0.625
Arsenic		ND		0.625	3.17		0.625	ND		0.625	1.34		0.625
Copper		40.0		1.25	12.5		1.25	8.63		1.25	8.21		1.25
Lead		19.6		0.313	113		0.313	43.3		0.313	37.4		0.313

	Lab ID:	04553-009			04553-010			04553-011			04553-012		
		AREA A			AREA B			AREA C			AREA 1		
	Client ID:	COMPOSITE			COMPOSITE			COMPOSITE			COMPOSITE		
	Matrix:	Solid			Solid			Solid			Solid		
	TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate			TCLP Leachate		
	Sampled Date	5/11/10			5/11/10			5/11/10			5/11/10		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
TCLP Metals (Units)		*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*		
TCLP Antimony		ND		0.050	ND		0.050	ND		0.050	ND		0.050
TCLP Arsenic		ND		0.100	ND		0.100	ND		0.100	ND		0.100
TCLP Copper		ND		0.100	ND		0.100	ND		0.100	ND		0.100
TCLP Lead		0.239		0.050	ND		0.050	0.192		0.050	0.314		0.050

ND = Analyzed for but Not Detected at the MDL

Sample Summary

IAL Case No.

E10-04553

Client CEMCO

Project CDM DEBRIS REMOVAL

Received On 5/13/2010@16:20

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
04553-001	AREA A DEBRIS 1	n/a	5/11/2010@13:46	Solid	2
04553-002	AREA A DEBRIS 2	n/a	5/11/2010@13:46	Solid	2
04553-003	AREA B DEBRIS 1	n/a	5/11/2010@14:16	Solid	2
04553-004	AREA B DEBRIS 2	n/a	5/11/2010@14:16	Solid	2
04553-005	AREA C DEBRIS 1	n/a	5/11/2010@14:45	Solid	2
04553-006	AREA C DEBRIS 2	n/a	5/11/2010@14:45	Solid	2
04553-007	AREA 1 DEBRIS 1	n/a	5/11/2010@15:25	Solid	2
04553-008	AREA 1 DEBRIS 2	n/a	5/11/2010@15:25	Solid	2

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

MATRIX QUALIFIERS

A - Indicates the sample is an Aqueous matrix.

O - Indicates the sample is an Oil matrix.

S - Indicates the sample is a Soil, Sludge or Sediment matrix.

X - Indicates the sample is an Other matrix as indicated by Client Chain of Custody.

DATA QUALIFIERS

B - Indicates the analyte was found in the Blank and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of the analyte.

C - Common Laboratory Contaminant.

D - The compound was reported from the Diluted analysis.

D.F. - Dilution Factor.

E - Estimated concentration, reported results are outside the calibrated range of the instrument.

J - Indicates the concentration was reported below the RL but above the MDL. For GC/MS procedures, the mass spectral data meets the criteria required to identify the target compound.

RL - Reporting Limit.

MDL - Method Detection Limit.

MI - Indicates compound concentration could not be determined due to Matrix Interferences.

NA - Not Applicable.

ND - Indicates the compound was analyzed for but Not Detected at the MDL.

REPORT QUALIFIERS

All solid sample analyses are reported on a dry weight basis.

All solid sample values are corrected for original sample size and percent solids.

Q - Qualifier

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received eight (8) solid sample(s) from CEMCO (Project: CDM DEBRIS REMOVAL) on May 13, 2010 for the analysis of:

(8) Metal - Antimony
(8) Metal - Arsenic
(8) Metal - Copper
(8) Metal - Lead
(4) Metal - TCLP Arsenic
(4) Metal - TCLP Lead
(4) Metal - TCLP Copper
(4) Metal - TCLP Antimony
(8) Sample Composition

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

AJ Jones
Reviewed by

5/24/10
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E10-04553

		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address and date of report preparation.	✓
2.	Table of Contents.	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	✓
4.	Summary Table cross-referencing Field ID's vs. Lab ID's.	✓
5.	Document bound, paginated and legible.	✓
6.	Chain of Custody.	✓
7.	Methodology Summary.	✓
8.	Laboratory Chronicle and Holding Time Check.	✓
9.	Results submitted on a dry weight basis (if applicable).	✓
10.	Method Detection Limits.	✓
11.	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	✓
12.	NonConformance Summary.	✓

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
METAL ANALYSIS

Lab Case Number: E10-04553

		No	Yes
1.	Calibration Summary Meet Criteria.		✓
2.	ICP Interference Check Sample Results Meets Criteria (if applicable)		✓
3.	Serial Dilution/Post Spike Summary Submitted (if applicable) / Meets Criteria		✓
4.	Internal Standards Meet Criteria (if applicable)		✓
5.	Laboratory Control Sample Summary Submitted (if applicable) / Meets Criteria		✓
6.	Blank Contamination: If yes, list compounds and concentrations in each blank:	✓	
7.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria. (If not, list those compounds and their recoveries which fall outside the acceptable range).		✓
8.	Extraction Holding Time Met. If not, list number of days exceeded for each sample:		✓
9.	Analysis Holding Time Met. If not, list number of days exceeded for each sample:		✓

Additional Comments:

Wei Cheng
Inorganic Manager

May 24, 2010
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-001
Client ID: AREA A DEBRIS 1
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture: 0
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	2.68		1	2.50	0.625	05/14/10	6020
Arsenic	1.08	J	1	1.25	0.625	05/14/10	6020
Copper	6.95		1	5.00	1.25	05/14/10	6020
Lead	86.9		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-002
Client ID: AREA A DEBRIS 2
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	1.91	J	1	2.50	0.625	05/14/10	6020
Arsenic	1.20	J	1	1.25	0.625	05/14/10	6020
Copper	9.37		1	5.00	1.25	05/14/10	6020
Lead	63.1		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-003
Client ID: AREA B DEBRIS 1
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	ND		1	2.50	0.625	05/14/10	6020
Arsenic	0.661	J	1	1.25	0.625	05/14/10	6020
Copper	10.6		1	5.00	1.25	05/14/10	6020
Lead	26.2		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-004
Client ID: AREA B DEBRIS 2
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	0.724	J	1	2.50	0.625	05/14/10	6020
Arsenic	0.924	J	1	1.25	0.625	05/14/10	6020
Copper	15.8		1	5.00	1.25	05/14/10	6020
Lead	9.81		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-005
Client ID: AREA C DEBRIS 1
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	1.00	J	1	2.50	0.625	05/14/10	6020
Arsenic	ND		1	1.25	0.625	05/14/10	6020
Copper	40.0		1	5.00	1.25	05/14/10	6020
Lead	19.6		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-006
Client ID: AREA C DEBRIS 2
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	3.90		1	2.50	0.625	05/14/10	6020
Arsenic	3.17		1	1.25	0.625	05/14/10	6020
Copper	12.5		1	5.00	1.25	05/14/10	6020
Lead	113		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-007
Client ID: AREA 1 DEBRIS 1
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	1.22	J	1	2.50	0.625	05/14/10	6020
Arsenic	ND		1	1.25	0.625	05/14/10	6020
Copper	8.63		1	5.00	1.25	05/14/10	6020
Lead	43.3		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-008
Client ID: AREA 1 DEBRIS 2
Date Received: 5/13/2010
Matrix-Units: Solid-mg/Kg (ppm)
% Moisture:
Batch #: 191

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	1.14	J	1	2.50	0.625	05/14/10	6020
Arsenic	1.34		1	1.25	0.625	05/14/10	6020
Copper	8.21		1	5.00	1.25	05/14/10	6020
Lead	37.4		1	1.25	0.313	05/14/10	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-009
Client ID: AREA A COMPOSITE
Date Received: 5/13/2010
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 203

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Antimony	ND		1	0.200	0.050	05/21/10	1311/6020
TCLP Arsenic	ND		1	0.100	0.100	05/21/10	1311/6020
TCLP Copper	ND		1	0.400	0.100	05/21/10	1311/6020
TCLP Lead	0.239		1	0.100	0.050	05/21/10	1311/6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-010
Client ID: AREA B COMPOSITE
Date Received: 5/13/2010
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 203

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Antimony	ND		1	0.200	0.050	05/21/10	1311/6020
TCLP Arsenic	ND		1	0.100	0.100	05/21/10	1311/6020
TCLP Copper	ND		1	0.400	0.100	05/21/10	1311/6020
TCLP Lead	ND		1	0.100	0.050	05/21/10	1311/6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: CEMCO/CDM DEBRIS REMOVAL

Lab ID: E10-04553-012
Client ID: AREA 1 COMPOSITE
Date Received: 5/13/2010
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 203

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Antimony	ND		1	0.200	0.050	05/21/10	1311/6020
TCLP Arsenic	ND		1	0.100	0.100	05/21/10	1311/6020
TCLP Copper	ND		1	0.400	0.100	05/21/10	1311/6020
TCLP Lead	0.314		1	0.100	0.050	05/21/10	1311/6020

METALS QUALITY CONTROL

BLANK 2 RESULTS SUMMARY

Batch (Page) #: 191

Associated Lab Case for Blank 2: 03535, 04553, 04582

Matrix: Soil Unit: ppm (mg/kg) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Aluminum	5.00	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Copper	0.500	ND
Iron	12.5	ND
Lead	0.125	ND

Associated Sample for Blank 2:

03535-001~002,004; 04553-001~008; 04582-001~004,006
04582-008

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 191
Lab Case: 04575, 04457, 04500, 04525, 04491, 03535, 04582, 04553

Matrix: Soil Method: 6020 Concentration/Units: ppm (mg/kg)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Aluminum	0.005	ND	ND	ND	ND	ND	ND
Antimony	0.00025	ND	ND	ND	ND	ND	ND
Arsenic	0.00025	ND	ND	ND	ND	ND	ND
Barium	0.0025	ND	ND	ND	ND	ND	ND
Beryllium	0.0002	ND	ND	ND	ND	ND	ND
Cadmium	0.000125	ND	ND	ND	ND	ND	ND
Chromium	0.0005	ND	ND	ND	ND	ND	ND
Copper	0.0005	ND	ND	ND	ND	ND	ND
Iron	0.013	ND	ND	ND	ND	ND	ND
Lead	0.000125	ND	ND	ND	ND	ND	ND
Mercury	0.00012	ND	ND	ND	ND		
Nickel	0.0005	ND	ND	ND	ND	ND	ND
Selenium	0.001	ND	ND	ND	ND	ND	ND
Silver	0.000125	ND	ND	ND	ND	ND	ND
Thallium	0.000125	ND	ND	ND	ND	ND	ND
Zinc	0.002	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 191
Lab Case: 04575, 04457, 04500, 04525, 04491, 03535, 04582, 04553

Matrix: Soil Method: 6020 Concentration/Units: ppm (mg/kg)

ANALYTE	INST. MDL	CCB					
Aluminum	0.005	ND					
Antimony	0.00025	ND					
Arsenic	0.00025	ND					
Barium	0.0025	ND					
Beryllium	0.0002	ND					
Cadmium	0.000125	ND					
Chromium	0.0005	ND					
Copper	0.0005	ND					
Iron	0.013	ND					
Lead	0.000125	ND					
Nickel	0.0005	ND					
Selenium	0.001	ND					
Silver	0.000125	ND					
Thallium	0.000125	ND					
Zinc	0.002	ND					

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 191
Lab Case: 04575, 04457, 04500, 04525, 04491, 03535, 04582, 04553

Matrix: Soil Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	400	413	103	371	92.8	407	102	408	102
Antimony	0.250	120	126	105	131	109	127	106	128	107
Arsenic	0.250	20.0	20.6	103	18.5	92.5	20.4	102	20.7	104
Barium	2.50	400	408	102	420	105	434	109	420	105
Beryllium	0.200	10.0	10.4	104	10.6	106	10.5	105	10.9	109
Cadmium	0.125	10.0	10.1	101	10.3	103	10.7	107	10.7	107
Chromium	0.500	20.0	21.1	106	18.8	94.0	20.7	104	20.5	103
Copper	0.500	50.0	51.1	102	45.3	90.6	49.6	99.2	49.6	99.2
Iron	12.5	200	216	108	200	100	210	105	218	109
Lead	0.125	10.0	10.1	101	10.4	104	10.2	102	10.9	109
Mercury	0.120	5.00	5.18	104	5.16	103	5.16	103	5.20	104
Nickel	0.500	80.0	80.3	100	72.5	90.6	79.2	99.0	79.4	99.3
Selenium	1.00	10.0	10.7	107	9.72	97.2	10.0	100	10.5	105
Silver	0.125	20.0	18.9	94.5	19.4	97.0	18.3	91.5	18.3	91.5
Thallium	0.125	20.0	19.4	97.0	19.7	98.5	21.7	109	21.2	106
Zinc	2.00	40.0	41.8	105	37.6	94.0	40.9	102	41.8	105

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 191
Lab Case: 04575, 04457, 04500, 04525, 04491, 03535, 04582, 04553

Matrix: Soil Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R	CCV FOUND	CCV % R	CCV FOUND	CCV % R	FOUND	% R
Aluminum	5.00	400	371	92.8	404	101	361	90.3		
Antimony	0.250	120	127	106	132	110	130	108		
Arsenic	0.250	20.0	18.8	94.0	20.6	103	18.6	93.0		
Barium	2.50	400	431	108	427	107	439	110		
Beryllium	0.200	10.0	10.6	106	10.5	105	10.7	107		
Cadmium	0.125	10.0	10.6	106	10.6	106	10.6	106		
Chromium	0.500	20.0	19.3	96.5	20.5	103	18.2	91.0		
Copper	0.500	50.0	47.7	95.4	49.0	98.0	47.5	95.0		
Iron	12.5	200	195	97.5	212	106	187	93.5		
Lead	0.125	10.0	10.8	108	10.9	109	10.6	106		
Nickel	0.500	80.0	72.6	90.8	78.8	98.5	72.4	90.5		
Selenium	1.00	10.0	9.76	97.6	10.5	105	10.2	102		
Silver	0.125	20.0	18.8	94.0	18.6	93.0	18.8	94.0		
Thallium	0.125	20.0	21.1	106	21.4	107	21.8	109		
Zinc	2.00	40.0	37.5	93.8	40.7	102	37.3	93.3		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Batch (Page) #: 191
Lab Case: 04575, 04457, 04500, 04525, 04491, 03535, 04582, 04553

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	LRG	> LRG	NA	NA
Calcium	100000	-	110000	104000	104	NA
Iron	100000	-	109000	103000	103	NA
Potassium	100000	-	> LRG	> LRG	NA	NA
Magnesium	100000	-	> LRG	> LRG	NA	NA
Sodium	100000	-	> LRG	> LRG	NA	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2180	2230	112	NA
Titanium	2000	-	2170	2100	105	NA
Silver	-	20.0	-	19.0	95.0	80-120
Arsenic	-	20.0	-	22.3	112	80-120
Cadmium	-	20.0	-	21.2	106	80-120
Cobalt	-	20.0	-	21.4	107	80-120
Chromium	-	20.0	-	20.8	104	80-120
Copper	-	20.0	-	20.2	101	80-120
Manganese	-	20.0	-	23.1	116	80-120
Nickel	-	20.0	-	20.6	103	80-120
Zinc	-	20.0	-	22.9	115	80-120

%R = Percent Recovery

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 191
Lab Case: 04457, 04491, 04500, 04525, 04575, 03535, 04553, 04582

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	7490	6920	NC	228	5350	4840	NC	210	75-125
Antimony	55.6	ND	122	45.6	48.0	ND	114	42.0	75-125
Arsenic	67.8	11.1	124	45.6	43.1	0.523	101	42.0	75-125
Barium	523	464	NC	45.6					75-125
Beryllium	54.5	0.454	119	45.6					75-125
Cadmium	52.9	1.33	113	45.6					75-125
Chromium	68.3	21.2	103	45.6					75-125
Copper	272	220	114	45.6	46.6	3.59	102	42.0	75-125
Iron	20800	19700	NC	228	4090	3720	NC	210	75-125
Lead	1730	1650	NC	45.6	49.8	4.44	108	42.0	75-125
Mercury	2.82	2.68	NC	0.285					75-125
Nickel	69.8	21.6	106	45.6					75-125
Selenium	52.4	1.20	112	45.6					75-125
Silver	49.5	0.481	107	45.6					75-125
Thallium	51.5	0.362	112	45.6					75-125
Zinc	946	847	NC	45.6					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 04575-001
QC Sample 1 for following samples:
04457-001~004; 04491-001~007; 04500-001; 04525-001~006
04575-001~002

QC Sample 2 03535-002
QC Sample 2 for following samples:
03535-001~002,004; 04553-001~008; 04582-001~004,006
04582-008

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 191
Lab Case: 04457, 04491, 04500, 04525, 04575, 03535, 04553, 04582

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	6920	6720	2.93	20	4840	5070	4.64
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	20	11.1	10.7	3.67	20	0.523	0.610	15.4
Barium	20	464	550	17.0				
Beryllium	20	0.454	0.539	17.1				
Cadmium	20	1.33	1.55	15.3				
Chromium	20	21.2	19.7	7.33				
Copper	20	220	205	7.06	20	3.59	3.88	7.76
Iron	20	19700	18400	6.82	20	3720	3780	1.60
Lead	20	1650	1960	17.2	20	4.44	4.49	1.12
Mercury	20	2.68	2.85	6.15				
Nickel	20	21.6	20.2	6.70				
Selenium	20	1.20	1.26	4.88				
Silver	20	0.481	0.571	17.1				
Thallium	20	0.362	0.358	1.11				
Zinc	20	847	798	5.96				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1 04575-001
QC Sample 1 for following samples:
04457-001~004; 04491-001~007; 04500-001; 04525-001~006
04575-001~002

QC Sample 2 03535-002
QC Sample 2 for following samples:
03535-001~002,004; 04553-001~008; 04582-001~004,006
04582-008

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 191
Lab Case: 04457, 04491, 04500, 04525, 04575, 03535, 04553, 04582

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	BSS1			BSS2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	212	106	200	207	104
Antimony	40.0	45.3	113	40.0	43.2	108
Arsenic	40.0	40.4	101	40.0	42.6	107
Barium	40.0	45.6	114			
Beryllium	40.0	44.5	111			
Cadmium	40.0	44.8	112			
Chromium	40.0	41.4	104			
Copper	40.0	41.7	104	40.0	43.0	108
Iron	200	217	109	200	213	107
Lead	40.0	45.5	114	40.0	43.3	108
Mercury	0.250	0.238	95.2			
Nickel	40.0	41.1	103			
Selenium	40.0	42.6	107			
Silver	40.0	42.2	106			
Thallium	40.0	43.8	110			
Zinc	40.0	40.9	102			

(1) Control Limits % Recovery = 85-115%

BSS1	BSS2
04457-001~004; 04491-001~007; 04500-001; 04525-001~006	03535-001~002,004; 04553-001~008; 04582-001~004,006
04575-001~002	04582-008

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 2

Batch (Page) #: 191
Lab Case: 03535, 04553, 04582

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	4840	5180	6.79			
Antimony	ND			48.1	42.0	115
Arsenic	0.523			47.6	42.0	112.0
Copper	3.59			52.1	42.0	116.0
Iron	3720	3950	6.00			
Lead	4.44	4.86	9.03			

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample2 : 03535-002
QC Sample 2 for following samples:
03535-001~002,004; 04553-001~008; 04582-001~004,006
04582-008

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

Batch (Page) #: 203

Associated Lab Case for Blank 1: 04553, 04603, 04742

Matrix: Leachate Unit: ppm (mg/L) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Antimony	0.050	ND
Arsenic	0.100	ND
Barium	0.500	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Copper	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.200	ND
Silver	0.025	ND
Zinc	0.200	ND

Associated Sample for Blank 1:

04553-009~012; 04603-004,007,012,016,021,026,030,035
04603-042,050,056,063,069~071; 04742-001

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 203
Lab Case: 04603, 04742, 04553

Matrix: Leachate Method: 6020 Concentration/Units: ppm (mg/L)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Antimony	0.00025	ND	ND	ND	ND	ND	
Arsenic	0.0005	ND	ND	ND	ND	ND	
Barium	0.0025	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Copper	0.0005	ND	ND	ND	ND	ND	
Lead	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00015	ND	ND	ND			
Nickel	0.0005	ND	ND	ND	ND	ND	
Selenium	0.001	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	
Zinc	0.001	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 203
Lab Case: 04603, 04742, 04553

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Antimony	0.250	120	122	102	120	100	122	102	119	99.2
Arsenic	0.500	20.0	19.9	99.5	18.8	94.0	21.8	109	19.4	97.0
Barium	2.50	400	395	98.8	388	97.0	392	98.0	388	97.0
Cadmium	0.125	10.0	10.3	103	9.78	97.8	10.0	100	9.83	98.3
Chromium	0.500	20.0	20.6	103	19.5	97.5	21.7	109	20.3	102
Copper	0.500	50.0	48.4	96.8	45.8	91.6	53.2	106	47.8	95.6
Lead	0.250	10.0	9.93	99.3	9.72	97.2	9.93	99.3	9.66	96.6
Mercury	0.150	5.00	5.23	105	5.37	107	5.47	109		
Nickel	0.500	80.0	75.7	94.6	72.1	90.1	83.9	105	74.3	92.9
Selenium	1.00	10.0	10.0	100	9.01	90.1	10.5	105	10.1	101
Silver	0.125	20.0	18.3	91.5	18.2	91.0	18.1	90.5	18.0	90.0
Zinc	1.00	40.0	36.5	91.3	36.1	90.3	42.1	105	37.7	94.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 203
Lab Case: 04603, 04742, 04553

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV							
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Antimony	0.250	120	122	102						
Arsenic	0.500	20.0	19.3	96.5						
Barium	2.50	400	401	100						
Cadmium	0.125	10.0	9.86	98.6						
Chromium	0.500	20.0	19.6	98.0						
Copper	0.500	50.0	45.5	91.0						
Lead	0.250	10.0	9.76	97.6						
Nickel	0.500	80.0	72.0	90.0						
Selenium	1.00	10.0	9.79	97.9						
Silver	0.125	20.0	18.3	91.5						
Zinc	1.00	40.0	36.5	91.3						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Batch (Page) #: 203
Lab Case: 04603, 04742, 04553

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	> LRG	> LRG	NA	NA
Calcium	100000	-	101000	119000	119	NA
Iron	100000	-	-	-	-	NA
Potassium	100000	-	> LRG	> LRG	NA	NA
Magnesium	100000	-	> LRG	> LRG	NA	NA
Sodium	100000	-	> LRG	> LRG	NA	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2390	2400	120	NA
Titanium	2000	-	2170	2570	129	NA
Silver	-	20.0	-	21.1	106	80-120
Arsenic	-	20.0	-	22.5	113	80-120
Cadmium	-	20.0	-	21.9	110	80-120
Cobalt	-	20.0	-	23.0	115	80-120
Chromium	-	20.0	-	22.9	115	80-120
Copper	-	20.0	-	23.9	120	80-120
Manganese	-	20.0	-	23.4	117	80-120
Nickel	-	20.0	-	23.6	118	80-120
Zinc	-	20.0	-	23.5	118	80-120

%R = Percent Recovery

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 203
Lab Case: 04553, 04603, 04742

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Antimony	4.17	ND	104	4.00					75-125
Arsenic	4.10	ND	103	4.00					75-125
Barium	4.20	ND	105	4.00					75-125
Cadmium	4.18	ND	105	4.00					75-125
Chromium	4.19	ND	105	4.00					75-125
Copper	4.05	ND	101	4.00					75-125
Lead	4.17	ND	104	4.00					75-125
Mercury	0.011	ND	110	0.010					75-125
Nickel	3.95	ND	98.8	4.00					75-125
Selenium	3.99	ND	99.8	4.00					75-125
Silver	4.01	ND	100	4.00					75-125
Zinc	3.48	ND	87.0	4.00					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 04603-016
QC Sample 1 for following samples:
04553-009~012; 04603-004,007,012,016,021,026,030,035
04603-042,050,056,063,069~071; 04742-001

QC Sample 2 _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 203
Lab Case: 04553, 04603, 04742

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Antimony	NA	ND	ND	NC				
Arsenic	NA	ND	ND	NC				
Barium	NA	ND	ND	NC				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Copper	NA	ND	ND	NC				
Lead	NA	ND	ND	NC				
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Zinc	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1 04603-016
QC Sample 1 for following samples:
04553-009~012; 04603-004,007,012,016,021,026,030,035
04603-042,050,056,063,069~071; 04742-001

QC Sample 2 _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 203
Lab Case: 04553, 04603, 04742

Matrix: Leachate Unit: ppm (mg/L)

ANALYTE	BST1			BST2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Antimony	4.00	4.24	106			
Arsenic	4.00	4.21	105			
Barium	4.00	4.21	105			
Cadmium	4.00	4.22	106			
Chromium	4.00	4.28	107			
Copper	4.00	4.16	104			
Lead	4.00	4.19	105			
Mercury	0.010	0.011	110			
Nickel	4.00	4.03	101			
Selenium	4.00	3.99	99.8			
Silver	4.00	4.09	102			
Zinc	4.00	3.47	86.8			

(1) Control Limits % Recovery = 85-115%

BST1	BST2
04553-009~012; 04603-004,007,012,016,021,026,030,035	
04603-042,050,056,063,069~071; 04742-001	

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 203
Lab Case: 04553, 04603, 04742

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Antimony	ND			4.14	4.00	104
Arsenic	ND			3.99	4.00	99.8
Barium	ND			4.17	4.00	104
Cadmium	ND			4.03	4.00	101
Chromium	ND			4.02	4.00	101
Copper	ND			3.86	4.00	96.5
Lead	ND			4.19	4.00	105
Nickel	ND			3.78	4.00	94.5
Selenium	ND			3.90	4.00	97.5
Silver	ND			3.97	4.00	99.3
Zinc	ND			3.29	4.00	82.3

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1 : 04603-016
QC Sample 1 for following samples:
04553-009~012; 04603-004,007,012,016,021,026,030,035
04603-042,050,056,063,069~071; 04742-001

PROJECT INFORMATION

** RUSH **

E10-04553

Case No. E10-04553 Project CDM DEBRIS REMOVAL

Sample #	Tests	Status	QA Method
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
005	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
006	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
007	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
008	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
009	TCLP Antimony - Sb	Run	1311/6020
"	TCLP Arsenic - As	Run	1311/6020
"	TCLP Copper - Cu	Run	1311/6020
"	TCLP Lead - Pb	Run	1311/6020
010	TCLP Antimony - Sb	Run	1311/6020
"	TCLP Arsenic - As	Run	1311/6020
"	TCLP Copper - Cu	Run	1311/6020
"	TCLP Lead - Pb	Run	1311/6020
011	TCLP Antimony - Sb	Run	1311/6020
"	TCLP Arsenic - As	Run	1311/6020
"	TCLP Copper - Cu	Run	1311/6020
"	TCLP Lead - Pb	Run	1311/6020
012	TCLP Antimony - Sb	Run	1311/6020
"	TCLP Arsenic - As	Run	1311/6020
"	TCLP Copper - Cu	Run	1311/6020
"	TCLP Lead - Pb	Run	1311/6020

05/19/2010 16:43 by Mark - REV 1

REV 01 DUE 5/24/10

PER ED BONAR, COMPOSITE SAMPLES #1 & 2 TO FORM SAMPLE #9.
COMPOSITE SAMPLES #3 & 4 TO CREATE SAMPLE #10
COMPOSITE SAMPLES #5 & 6 TO CREATE SAMPLE #11
COMPOSITE SAMPLES #7 & 8 TO CREATE SAMPLE #12

ANALYZE SAMPLES #9 - 12 FOR TCLP CU, TCLP SB, TCLP PB & TCLP

ORIGINAL FAX SENT 5/14/10

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

PROJECT INFORMATION

** RUSH **

E10-04553

Case No. E10-04553 Project CDM DEBRIS REMOVAL

Customer	CEMCO	P.O. #	2263 B
Contact	Edward Bonar	Received	5/13/2010 16:20
EMail	☐ EMail EDDs	Verbal Due	5/24/2010
Phone	(609) 261-3848 Fax 1(609) 261-3574	Report Due	6/4/2010

Report To

P.O. Box 212
Hainesport, NJ 08036

Attn: Edward Bonar

Bill To

P.O. Box 212
Hainesport, NJ 08036

Attn: Edward Bonar

Report Format Reduced

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
04553-001	AREA A DEBRIS 1	n/a	5/11/2010@13:46	Solid	mg/Kg	2
04553-002	AREA A DEBRIS 2	n/a	5/11/2010@13:46	Solid	mg/Kg	2
04553-003	AREA B DEBRIS 1	n/a	5/11/2010@14:16	Solid	mg/Kg	2
04553-004	AREA B DEBRIS 2	n/a	5/11/2010@14:16	Solid	mg/Kg	2
04553-005	AREA C DEBRIS 1	n/a	5/11/2010@14:45	Solid	mg/Kg	2
04553-006	AREA C DEBRIS 2	n/a	5/11/2010@14:45	Solid	mg/Kg	2
04553-007	AREA 1 DEBRIS 1	n/a	5/11/2010@15:25	Solid	mg/Kg	2
04553-008	AREA 1 DEBRIS 2	n/a	5/11/2010@15:25	Solid	mg/Kg	2
04553-009	AREA A COMPOSITE	n/a	5/19/2010	Solid	mg/Kg	
04553-010	AREA B COMPOSITE	n/a	5/11/2010	Solid	mg/Kg	
04553-011	AREA C COMPOSITE	n/a	5/11/2010	Solid	mg/Kg	
04553-012	AREA 1 COMPOSITE	n/a	5/11/2010	Solid	mg/Kg	

Sample #	Tests	Status	QA Method
001	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
002	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
003	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020
"	Lead - Pb	Complete	6020
"	Sample Composition	Run	
004	Antimony - Sb	Complete	6020
"	Arsenic - As	Complete	6020
"	Copper - Cu	Complete	6020

0039

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 10** **04553** CLIENT: Gemco

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 5/13/10

CORRECTIVE ACTION REQUIRED: **YES** [ ] (SEE BELOW) **NO** [ ]

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 5/13/10

Laboratory Custody Chronicle

IAL Case No.
E10-04553

Client CEMCO

Project CDM DEBRIS REMOVAL

Received On 5/13/2010@16:20

Department: Metals			Prep. Date	Analyst	Analysis Date	Analyst
Antimony - Sb	04553-001	Solid	5/13/10	Lisa	5/14/10	Wei
"	-002	"	5/13/10	Lisa	5/14/10	Wei
"	-003	"	5/13/10	Lisa	5/14/10	Wei
"	-004	"	5/13/10	Lisa	5/14/10	Wei
"	-005	"	5/13/10	Lisa	5/14/10	Wei
"	-006	"	5/13/10	Lisa	5/14/10	Wei
"	-007	"	5/13/10	Lisa	5/14/10	Wei
"	-008	"	5/13/10	Lisa	5/14/10	Wei
Arsenic - As	-001	Solid	5/13/10	Lisa	5/14/10	Wei
"	-002	"	5/13/10	Lisa	5/14/10	Wei
"	-003	"	5/13/10	Lisa	5/14/10	Wei
"	-004	"	5/13/10	Lisa	5/14/10	Wei
"	-005	"	5/13/10	Lisa	5/14/10	Wei
"	-006	"	5/13/10	Lisa	5/14/10	Wei
"	-007	"	5/13/10	Lisa	5/14/10	Wei
"	-008	"	5/13/10	Lisa	5/14/10	Wei
Copper - Cu	-001	Solid	5/13/10	Lisa	5/14/10	Wei
"	-002	"	5/13/10	Lisa	5/14/10	Wei
"	-003	"	5/13/10	Lisa	5/14/10	Wei
"	-004	"	5/13/10	Lisa	5/14/10	Wei
"	-005	"	5/13/10	Lisa	5/14/10	Wei
"	-006	"	5/13/10	Lisa	5/14/10	Wei
"	-007	"	5/13/10	Lisa	5/14/10	Wei
"	-008	"	5/13/10	Lisa	5/14/10	Wei
Lead - Pb	-001	Solid	5/13/10	Lisa	5/14/10	Wei
"	-002	"	5/13/10	Lisa	5/14/10	Wei
"	-003	"	5/13/10	Lisa	5/14/10	Wei
"	-004	"	5/13/10	Lisa	5/14/10	Wei
"	-005	"	5/13/10	Lisa	5/14/10	Wei
"	-006	"	5/13/10	Lisa	5/14/10	Wei
"	-007	"	5/13/10	Lisa	5/14/10	Wei
"	-008	"	5/13/10	Lisa	5/14/10	Wei
TCLP Antimony - Sb	-009	Solid	5/20/10	Lisa	5/21/10	Wei
"	-010	"	5/20/10	Lisa	5/21/10	Wei
"	-011	"	5/20/10	Lisa	5/21/10	Wei
"	-012	"	5/20/10	Lisa	5/21/10	Wei
TCLP Arsenic - As	-009	Solid	5/20/10	Lisa	5/21/10	Wei
"	-010	"	5/20/10	Lisa	5/21/10	Wei
"	-011	"	5/20/10	Lisa	5/21/10	Wei
"	-012	"	5/20/10	Lisa	5/21/10	Wei
TCLP Copper - Cu	-009	Solid	5/20/10	Lisa	5/21/10	Wei
"	-010	"	5/20/10	Lisa	5/21/10	Wei
"	-011	"	5/20/10	Lisa	5/21/10	Wei
"	-012	"	5/20/10	Lisa	5/21/10	Wei
TCLP Lead - Pb	-009	Solid	5/20/10	Lisa	5/21/10	Wei
"	-010	"	5/20/10	Lisa	5/21/10	Wei

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

Laboratory Custody Chronicle

IAL Case No.
E10-04553

Client CEMCO

Project CDM DEBRIS REMOVAL

Received On 5/13/2010@16:20

"	-011	"	5/20/10	Lisa	5/21/10	Wei
"	-012	"	5/20/10	Lisa	5/21/10	Wei

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

Phone # (973) 361-4252
Fax # (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES
CHAIN OF CUSTODY

273 Franklin Rd
Randolph, NJ 07869

CUSTOMER INFO	
Company:	Cemco
Address:	PO Box 212
	Hainesport NJ 08036
Telephone #:	(609) 261-3848
Fax #:	(609) 261-3574
Project Manager:	Ed Bonar
Sampler:	David Kudla
Project Name:	CDM Debris Removal
Project Location (State):	Old Bridge TWP, NJ
Bottle Order #:	
Quote # :	

REPORTING INFO	
REPORT TO:	Cemco
Address:	PO Box 212
	Hainesport NJ 08036
Attn:	Ed Bonar
FAX #	(609) 261-3574
INVOICE TO:	Ed Bonar
Address:	PO Box 212
	Hainesport NJ 08036
Attn:	Ed Bonar
PO #	22633

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

DRO (3-5 day TAT) QAM025 (5 day TAT min.)

SEE BELOW (under comments section for explanation)

Verbal/Fax **2 wk/Std** Results needed by: 5/14/10

24 hr* (48 hr*) 72 hr* 1 wk*

Hard Copy **3 wk/Std**

Other * call for price

Rush TAT Charge **: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day 10%

Report Format: Results Only; (Reduced); Regulatory - 15% Surcharge applies; Other (describe)

DISKETTE: (SRP.dbf format); SRP.wk1 format; lab approved custom EDD; NO DISK/CD REQ'D

Cooler Temp _____ °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	Lead	Antimony	Arsenic	Copper	# BOTTLES & PRESERVATIVES: HCl	NaOH	HNO3	H2SO4	MeOH	Other	None	Encore
Area A Debris 1	Surface	5/11/10	1346	SOL		1	X	X	X	X						2	2	
Area A Debris 2	"	"	1346	"		2	X	X	X	X							2	
Area B Debris 1	"	"	1416	"		3	X	X	X	X							2	
Area B Debris 2	"	"	1416	"		4	X	X	X	X							2	
Area C Debris 1	"	"	1445	"		5	X	X	X	X							2	
Area C Debris 2	"	"	1445	"		6	X	X	X	X							2	
Area 1 Debris 1	"	"	1525	"		7	X	X	X	X							2	
Area 1 Debris 2	"	"	1525	"		8	X	X	X	X							2	

Known Hazard: Yes or (No) Describe:

Conc. Expected: Low Med High

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

MDL Req: Old GWQS - 11/05 GWQS - SCC - OTHER (SEE COMMENTS)

Signature/Company	Date	Time	Signature/Company
Relinquished by:	5/11/10	0900	Received by:
Relinquished by:	5/13/10	1620	Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:

Comments:

DRO (8015B) - used for: Fuel Oil #2/Home Heating Oil #1/#2
QAM-025 (OQA-QAM025) - used for: all other fuel oil and unknown contaminants.

Lab Case # 04553

PAGE: of

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

01/2007 rev

Attachment C
MCUA non-hazardous determination letter

MIDDLESEX COUNTY UTILITIES AUTHORITY
MAIN OFFICES:
2571 MAIN STREET • P.O. BOX 159 • SAYREVILLE, NJ 08872-0159
(732) 721-3600 FAX: (732) 721-0206
MIDDLESEX COUNTY LANDFILL OFFICE:
55 EDGEBORO ROAD • EAST BRUNSWICK, NJ 08816-1636
(732) 246-4313 FAX: (732) 246-8846

RICHARD L. FITAMANT, EXECUTIVE DIRECTOR
MARGARET H. BRENNAN, COMPTROLLER
DONATO J. TANZI, WASTEWATER DIVISION
PAUL T. CLARK, SOLID WASTE DIVISION
JOHN A. HILA, ESQ., COUNSEL

REPLY TO:
☐ SAYREVILLE
☐ EAST BRUNSWICK

May 18, 2010

Cemco
Ms. Jennifer Anton
PO Box 212
Hainesport, NJ 08036

Re: Beach Cleanup – ID #13
Sayreville and Old Bridge, New Jersey

Dear Ms. Anton:

After a review of the analytical, we find this material (wood, seaweed and trash) acceptable for disposal at the Middlesex County Landfill.

Please be sure your waste hauler indicates ID #13 on the Origin and Disposal Form.

If you have any questions or require additional information, please contact this office at the above number.

Sincerely,

Brian T. Murray

Brian T. Murray
Superintendent of Operations
Middlesex County Landfill

BTM/cdl

Attachment D
Non-hazardous waste manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NA	1	609-261-3848	2257

GENERATOR

5. Generator's Name and Mailing Address

USEPA Region 2
290 Broadway
New York, NY 10007 (212)637-4410

Generator's Site Address (if different than mailing address)

Old Bridge Waterfront Park
Raritan Bay Slag Superfund Site
Old Bridge Township, NJ

6. Transporter 1 Company Name — U.S. EPA ID Number

CEMCO-Custom Environmental Management Co Inc

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: (732) 246-4313

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	20	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Ed Kulkusky — Signature: Ed Kulkusky — Month: 5 Day: 6 Year: 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: cemco Ray Grover — Signature: Ray Grover — Month: 05 Day: 06 Year: 10

Transporter 2 Printed/Typed Name: CEMCO/ — Signature: — Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month: Day: Year:

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	609-261-3848	2257

GENERATOR

5. Generator's Name and Mailing Address
USEPA Region 2
290 Broadway
New York, NY 10006
Box #207
Generator's Phone:

Generator's Site Address (if different than mailing address)
Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc. — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: (732) 246-4313 — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	20 yd.		
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ON BEHALF OF THE U.S. ENVIRONMENTAL PROTECTION Region 2 Agency — Signature — Month: 5 — Day: 24 — Year: 2010

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CEMCO R. G. — Signature: Ray Grover — Month: 05 — Day: 25 — Year: 10

Transporter 2 Printed/Typed Name: CEMCO — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	609-261-3848	2257

GENERATOR

5. Generator's Name and Mailing Address

USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

BOX #207

Generator's Site Address (if different than mailing address)

Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc. — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address — U.S. EPA ID Number:

Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: ~~(732) 246-4313~~

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	20 yd		
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ON BEHALF of the U.S. ENVIRONMENTAL PROTECTION AGENCY Region 2 — Signature — Month 5 — Day 24 — Year 2010

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CEMCO R. A. — Signature: Ray Brown — Month 05 — Day 25 — Year 10

Transporter 2 Printed/Typed Name: ~~CEMCO~~ — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	609-261-3848	2257

5. Generator's Name and Mailing Address

USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

BOX # 207

Generator's Site Address (if different than mailing address)

Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name

CEMCO-Custom Environmental Management Co., Inc.

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: ~~(732) 246-4313~~

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	20yd.		
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ON BEHALF OF The US ENVIRONMENTAL PROTECTION
Signature: Region 2 Agency
Month: 5 Day: 26 Year: 10

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CEMCO R. G.
Signature: Ray Grover
Month: 05 Day: 26 Year: 10

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: Day: Year:

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 609-261-3848	4. Waste Tracking Number 2257

GENERATOR

5. Generator's Name and Mailing Address
USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

BOX # 207

Generator's Site Address (if different than mailing address)
Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc. — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address — U.S. EPA ID Number:
Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: (732) 246-4313

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	20 yd		
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ON BEHALF OF The US ENVIRONMENTAL PROTECTION Region 2 Agency — Signature — Month 05 Day 26 Year 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CEMCO R. G. — Signature: Ray Grover — Month 05 Day 26 Year 10

Transporter 2 Printed/Typed Name: CEMCO — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	609-261-3848	

GENERATOR

5. Generator's Name and Mailing Address
USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

Generator's Site Address (if different than mailing address)
Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc.
U.S. EPA ID Number:

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: (732) 246-4313
U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	0020	YD	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: ON BEHALF OF US E.P.A. REGION 2 Signature: [signature] Month: 5 Day: 26 Year: 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: GEORGE L. ZIESEL FOR CEMCO Signature: [signature] Month: 05 Day: 26 Year: 10
Transporter 2 Printed/Typed Name: CEMCO Signature: [signature] Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Signature: AB Month: Day: Year:

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 609-261-3848	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address
USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

Generator's Site Address (if different than mailing address)
Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc. — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Middlesex County Utilities Authority
53 Edgeboro Road
East Brunswick, NJ 08816
Facility's Phone: ~~(732) 246-4313~~ — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	Non RCRA/Non DOT Regulated Waste Solid (ID-10)	001	CM	0020	yD
2.					
3.					
4.					

MIDDLESEX COUNTY UTILITIES AUTHORITY
2010 MAY 28 AM 7:45

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ON BeHalf OF USEPA — Signature: [signature] — Month: 5 — Day: 27 — Year: 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: GEORGE L. ZIESEL FOR CEMCO — Signature: [signature] — Month: 05 — Day: 27 — Year: 10

Transporter 2 Printed/Typed Name: CEMCO — Signature: [signature] — Month: — Day: — Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month: — Day: — Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month: — Day: — Year:

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 609-261-3848	4. Waste Tracking Number

5. Generator's Name and Mailing Address
USEPA Region 2
290 Broadway
New York, NY 10006
Generator's Phone:

Generator's Site Address (if different than mailing address)
Raritan Bay Slag Superfund Site
Old Bridge Waterfront Park
Laurence Harbor, NJ

6. Transporter 1 Company Name: CEMCO-Custom Environmental Management Co., Inc. — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address — U.S. EPA ID Number:
Casings Inc.
711 Ramsey Avenue
Hillside, NJ 07205
Facility's Phone: ~~(908) 851-7766~~

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Waste Solid (Scrap Tires for Recycling)	001	CM	30		
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Number Scrap Car Tires 26
Number Scrap Tractor Trailer Tires 4

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: X ~~TOM HORN FOR USAC~~ TOM HORN FOR USEPA — Signature: CDM FOR USEPA ~~CDM FOR USACE~~ — Month 6 Day 23 Year 10

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: CEMCO — Signature — Month 06 Day 23 Year 10
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year
4/23/10
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name — Signature — Month Day Year

169-BLC-O 5 11977 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

Attachment E
Daily Quality Control Reports

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 5/24/2010 **Prepared By:** Edward Kulkusky
Weather: Cloudy and rain; low-60 F

Onsite Personnel:

Name	Affiliation
Ed Kullkusky	CDM
Bob Gainer	CEMCO
Gene Jett	CEMCO

Field Activities & Accomplishments:

- CEMCO begins piling debris from Area 2 beach so it can be loaded into roll-offs and removed tomorrow to the landfill.

Difficulties & Solutions:

N/A

Projected Work

- Continue clearing Area 2 beach of debris and areas along the sea wall (Area 1).

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 5/25/2010 **Prepared By:** Edward Kulkusky
Weather: Sunny and hot; low-80 F

Onsite Personnel:

Name	Affiliation
Ed Kullkusky	CDM
Bob Gainer	CEMCO
Gene Jett	CEMCO
Ray Grover	CEMCO
Greg Pagano	CJ Fence

Field Activities & Accomplishments:

- CEMCO begins loading debris from Area 2 beach into roll-off and bringing it to the landfill.
- 2 Dumpsters full of debris were brought to the landfill.
- Access hole in fence (Area 1) was made to get machine into an area by the seawall that was inaccessible by any other means.

Difficulties & Solutions:

A miscommunication at the landfill between the scale operator and the operator on the landfill held up the driver on his first run. The matter has been cleared up and we should get more runs in tomorrow.

Projected Work

- Continue clearing beach of debris (Area 2) and areas along the sea wall (Area1).

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 5/26/2010 **Prepared By:** Edward Kulkusky
Weather: Sunny and hot; low-90 F

Onsite Personnel:

Name	Affiliation
Ed Kullkusky	CDM
Bob Gainer	CEMCO
Gene Jett	CEMCO
Ray Grover	CEMCO
George Ziesel	CEMCO

Field Activities & Accomplishments:

- CEMCO continues piling debris from beach (Area 2) and then loading into roll-off and bringing it to the landfill.
- 3 Dumpsters full of debris were brought to the landfill

Difficulties & Solutions:

- N/A

Projected Work

- Continue clearing beach of debris (Area 2) and areas along the sea wall (Area 1).

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 5/27/2010 **Prepared By:** Edward Kulkusky
Weather: Cloudy and hot; low-80 F

Onsite Personnel:

Name	Affiliation
Ed Kullkusky	CDM
Dante Porzilli	CDM
Bob Gainer	CEMCO
Gene Jett	CEMCO
George Ziesel	CEMCO

Field Activities & Accomplishments:

- CEMCO continues piling debris from beach (Area 2) and loading into roll-off and bringing it to the landfill.
- Walked along the full perimeter of the fence line (Area 1) and pulled out as much garbage as we could also flattening any organic debris piles.
- 1 Dumpsters full of debris was brought to the landfill
- Demobed from site

Difficulties & Solutions:

- N/A

Projected Work

- None removal completed

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/7/2010 **Prepared By:** Tom Horn
Weather: Partly cloudy, 72 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Ed Leonard	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO
Steven Nemeth	Central Jersey Fence
Anthony Pagano	Central Jersey Fence
Larry Mayerowitz	Middlesex County Parks and Recreation
Tanya Mitchell	USEPA

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included the general site hazards of slips/trips/falls, toxic plants and insects, allergic-reaction check, hospital route, chain of command, communication with the public, heat stress and PPE.
- CEMCO mobilized equipment including a track-mounted backhoe for the Margaret's Creek tree-timber removal activity.
- CEMCO accessed, extracted and stockpiled material from the east tributary.
- Central Jersey Fence installed a 12-foot gate within a section of the south fence.

Difficulties & Solutions:

- Initial partial delivery of Pine rental equipment required a second delivery to enable continuous dust monitoring.
- Vegetation thicker than expected, access to creek took longer than originally estimated.
- Mr Mayerowitz requested that the timber stock pile area for the eastern tributary be relocated from just east of the Margaret's Creek bridge to just east of the RT 35 access roadway.
- USEPA signage damage west of Margaret's Creek.
- Apparent fuel-oil storage tank dumped in wetlands adjacent to the Rt 35 access roadway (pipeline ROW).

Projected Work

- CEMCO to continue tree-timber removal from the east tributary.
- Tires stockpiled on the beach adjacent to jetty to be disposed offsite.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/8/2010 **Prepared By:** Tom Horn
Weather: Partly cloudy, 72 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included a round-robin discussion of H&S expectations of the crew to promote interactive involvement. Safe driving practices, first-aid, heavy lifting techniques, hospital route, verbal and non-verbal communication with rig operator, heat stress and PPE.
- CEMCO continued efforts on the tree-timber Removal activity from the east tributary of Margaret's Creek.
- The crew completed extraction of material to approximately 225 ft south of the creek fork to temporary staging piles adjacent to the creek.
- They hauled some of the material to the approved stockpile area.

Difficulties & Solutions:

- Timbers in eastern estimated at 150 to 200 ft from stream fork. Timbers deposition approximately 225 ft from tributary fork.

Projected Work

- CEMCO to continue stockpiling of tree-timber material from the east tributary.
- Tires stockpiled on the beach adjacent to jetty to be disposed offsite.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/9/2010 **Prepared By:** Tom Horn
Weather: Light rain, 65 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included heavy-lifting techniques, hospital route, heavy machinery awareness, rig kill-switch, heat stress and PPE.
- CEMCO continued efforts on the tree-timber removal activity from the east tributary of Margaret's Creek.
- The crew hauled most of the material to the approved stockpile area.
- Reconnaissance of backyard at the residence at 95 Blvd. West, Cliffwood Beach was performed to investigate the possible cause of a reported claim of flooding.

Difficulties & Solutions:

- None

Projected Work

- CEMCO to complete stockpiling of tree-timber material from the east tributary.
- CEMCO to perform tree-timber removal from the west tributary.
- Tires stockpiled on the beach adjacent to Jetty to be disposed offsite with additional tires uncovered in the east tributary.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/10/2010 **Prepared By:** Tom Horn
Weather: Cloudy, 78 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included hazard awareness, slips/trips/falls, communication and PPE.
- CEMCO completed removal of the tree-timber materials from the east tributary of Margaret's Creek.
- The material was placed in the approved east stockpile area.
- CEMCO mobilized their equipment to the park and accessed the west tributary.
- The crew removed tree-timber materials from the west tributary and staged them temporarily in locations adjacent to the creek.
- Met with Ms. Mayer, the owner of the residence at 95 Blvd. West, Cliffwood Beach, who described her concern with rising water levels in the wetland abutting her property.

Difficulties & Solutions:

- Area around west tributary of creek has more standing water in wetlands the east tributary. Mats may be required.

Projected Work

- CEMCO to continue tree-timber removal from the west tributary.
- Tires stockpiled on the beach adjacent to jetty and from Margaret's Creek to be disposed offsite.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/11/2010 **Prepared By:** Tom Horn
Weather: Partly cloudy, 82 F

Onsite Personnel:

Name	Affiliation
Ed Leonard	CDM
Tom Horn	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included general site hazards such as slips/trips/falls, hospital route and heat stress.
- CEMCO completed removal of the tree-timber materials to temporary staging piles adjacent to the west tributary of Margaret's Creek.
- The crew transferred some of the materials from the staged locations to the approved west stockpile area.
- Collected additional photo-documents at the Mayer residence at 95 Blvd. West, Cliffwood Beach, to determine if the improved drainage from Margaret's Creek may have altered the water level in the wetland abutting her property.

Difficulties & Solutions:

- Mat was laid down along access path from western tributary to stock pile area.

Projected Work

- CEMCO to continue tree-timber stockpiling from the west tributary.
- Tires stockpiled on the beach adjacent to jetty and from creek to be disposed offsite.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/14/2010 **Prepared By:** Tom Horn
Weather: Partly cloudy, 76 F

Onsite Personnel:

Name	Affiliation
Ed Leonard	CDM
Seth Kellogg	CDM
Tom Horn	CDM
Dan Goodwin	CEMCO
Emelio Zeoli	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included the general site hazards of slips/trips/falls and hospital route.
- The crew transferred the materials from the staged locations adjacent to the creek to the approved west stockpile area.
- CEMCO removed additional tree-timber materials from the west tributary of Margaret's Creek which became apparent when the water cleared and the level dropped.

Difficulties & Solutions:

- None

Projected Work

- CEMCO to complete tree-timber stockpiling from the west tributary.
- Tires from the creek and the beach adjacent to jetty to be disposed offsite.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/15/2010 **Prepared By:** Tom Horn
Weather: Clear, 83 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Dan Goodwin	CEMCO
Pelmar Jett	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included general site hazards such as slips/trips/falls, hospital route, heat stress and PPE.
- CEMCO completed the transfer of the materials from the staged locations adjacent to the west tributary to the approved west stockpile area.
- The crew pressure-washed the mats, twelve automobile tires removed from the west tributary of Margaret's Creek and the track-rig.
- The crew transferred the twelve tires from the west tributary and the ten tires previously stockpiled in Area 2 to the east stockpile area and placed them with the eight tires. There are thirty tires at the east stockpile area.
- CEMCO arrange for the track-rig to be demob from the site tomorrow.
- Monitoring equipment and peripheral materials were removed from the Rec Center. The facility was thoroughly cleaned prior to departing the site.

Difficulties & Solutions:

- None

Projected Work:

- CEMCO track-rig to be removed from the site.
- Tires stockpiled at the east stockpile location to be disposed offsite.
- Stockpiled tree-timbers in the eastern to be placed in roll-offs and disposed offsite by the County.

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/16/2010 **Prepared By:** Tom Horn
Weather: Clear, 75 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Jesus Cruz	United Rental Driver

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included general site hazards including slips/trips/falls.
- CEMCO arranged for their rental company to obtain the rig this morning. CDM provided access and the rig keys to the driver who removed the rig from the site via flatbed truck.

Difficulties & Solutions:

- CDM was informed that the driver would be onsite between 0800 and 0900. He arrived at 0945.

Projected Work:

- Tires stockpiled at the east stockpile location to be disposed offsite the week of June 21, 2010.
- Stockpiled tree-timbers in the eastern to be placed in roll-offs and disposed offsite by the County the week of June 21, 2010

Daily Quality Control Report
Remedial Investigation/Feasibility Study
Raritan Bay Slag Site
Old Bridge, New Jersey

Date: 6/23/2010 **Prepared By:** Tom Horn
Weather: Clear, 80 F

Onsite Personnel:

Name	Affiliation
Tom Horn	CDM
Bob Gainer	CEMCO
Shane Murphy	CEMCO

Field Activities & Accomplishments:

- Health and Safety kickoff discussion topics included general site hazards of heat stress, heavy lifting and safe driving.
- CEMCO loaded the thirty automobile tires from the stockpiled location and hauled them offsite via a step-van.
- CDM signed the Non-hazardous waste manifest for the shipment of the tires on behalf of the USACE.
- CDM received a phone call from Mrs. Paulette Mayer who described the water in her backyard as having receded to 95-percent of normal elevation. She also reported having observed dump-truck traffic along the east road. CDM informed her that the County has recently been transporting roll-off containers via the road for containerization of beach debris.

Difficulties & Solutions:

- CDM observed that the east gate was not secured upon arrival and locked it when the crew departed the site.

Projected Work:

- Stockpiled Tree-Timbers removed from the eastern tributaries to be placed in roll-offs and disposed offsite.

Attachment F
Photo Log

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-07-2010

CEMCO crew and track-hoe rig with grappler bucket

East tributary access mats

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-07-2010

East gate installed on 6/7/10

Damaged signage

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-07-2010

Tank in creek south of culvert under roadway

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-08-2010

East stockpile area

Timbers in the East tributary before excavation

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-08-2010

Debris management along the East tributary

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-10-2010

East tributary following debris removal

Transfer of mats for relocation to West tributary

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-10-2010

East stockpile

Tires adjacent to the East stockpile

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-10-2010

West tributary damming before excavation

West tributary damming before excavation

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-11-2010

West stockpile

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-11-2010

8'x14' planking extracted from West tributary

Flow increase in the West tributary following removal of materials

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-14-2010

West tributary access mats

West stockpile

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-15-2010

Power-washing the mats

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-15-2010

Power-washing adjacent to West stockpile area

Power-washing tires from West tributary

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-15-2010

Tires from the Area 2 beach and the West tributary staged at the East stockpile area for offsite disposal – thirty total

Transferring tires from West tributary

Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-15-2010

Tires from West tributary staged adjacent to West stockpile

West tributary following removal of debris

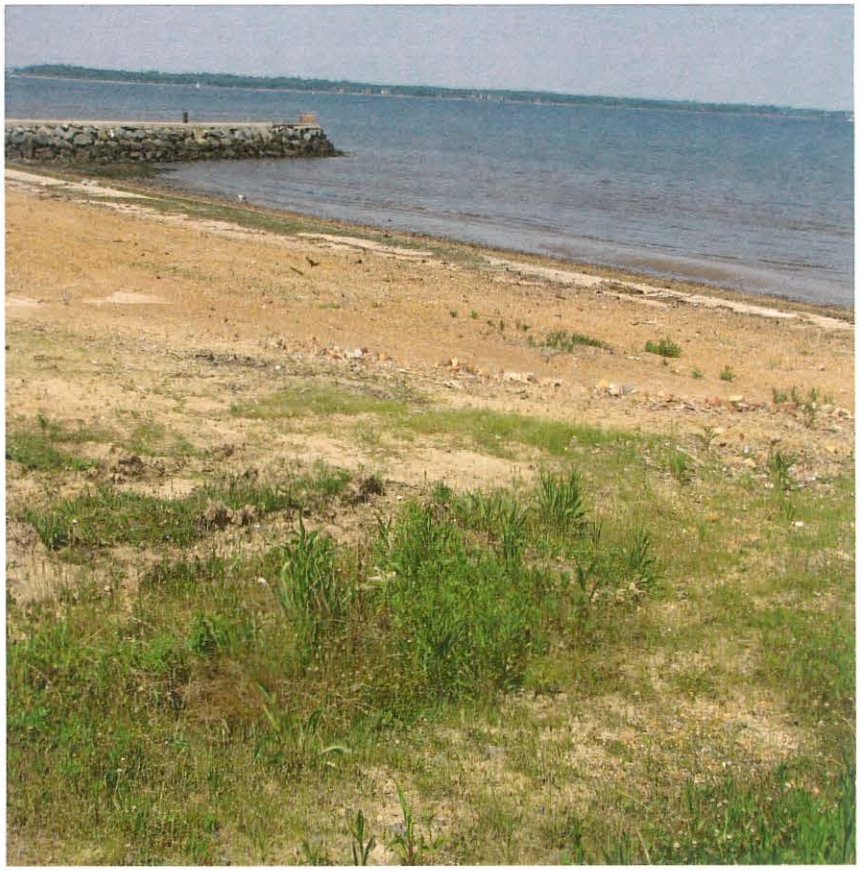
Raritan Bay Slag
Margaret's Creek Tree-Timber Removal
06-15-2010

West tributary following removal of debris

West stockpile area

Raritan Bay Slag
Area 2 Beach Debris Post Removal
6-15-10

Timber stock pile in background



Cleared beach looking northwest

Raritan Bay Slag
Area 2 Beach Debris Post Removal
6-15-10

Cleared beach looking west

Cleared path looking southwest